

## PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-081803  
 (43)Date of publication of application : 07.03.1995

(51)Int.Cl. C01B 31/02  
 061F 9/12

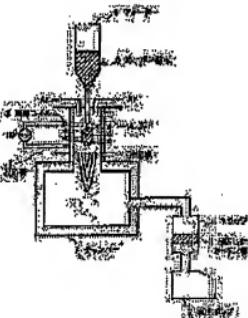
(21)Application number : 05-211662  
 (22)Date of filing : 28.08.1993  
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## (54) PRODUCTION OF FULLERENE AND CARBON NANOTUBE

## (57)Abstract

PURPOSE To synthesize fullerene and carbon nanotubes with good mass productivity.

CONSTITUTION: This method for synthesizing fullerene and carbon nanotubes comprises making Ar gas flow through the interior of a reactional tube 1 made of quartz glass, making a high-frequency electric current flow through an induction coil 3 wound around the periphery thereof under 2100Torr pressure, producing a thermal plasma 4, feeding powder 6 of carbon into the thermal plasma 4, evaporating and recombining the powder. Since the thermal plasma 4 produced by the high-frequency induction has a wide plasma region at a high temperature, a large amount of the carbon powder 6 can instantaneously be evaporated to synthesize large amounts of the fullerene and carbon nanotubes in a short time.



## LEGAL STATUS

[Date of request for examination] 18.03.1994  
 [Date of sending the examiner's decision of rejection]  
 [Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]  
 [Date of final disposal for application]  
 [Patent number] 2545511  
 [Date of registration] 08.08.1996  
 [Number of appeal against examiner's decision of rejection]  
 [Date of requesting appeal against examiner's decision of rejection]  
 [Date of extinction of right] 08.08.2001